



09/15/2010

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

In the Matter of

TV White Spaces
ET Docket Nos. 04-186 and 02-380

Dear Ms. Dortch:

This letter is for those inside the FCC drafting the text of the 2nd MO&O in the 04-186 proceeding and also for those influencing this work..

Thanks to past FCC Commission's, FCC rule makings have created amazing success stories like Part 15. For Part-15, the success story was based on the courageous work of an FCC that dared to put innovation & future economic development before support of existing investments and incumbent industries.

Given that history, on the even of this 2nd MO&O's quiet period, I wanted to urge the Commission to think about the future of what the right TV White space (TVWS) rules will enable.

America's trade deficit, US broadband policy and ubiquitous broadband access for our citizens, and even future American competitive advantage in the world economy can all be found to be at stake within this proceeding. If we get it right, the citizens of the US have significant competitive advantage in the future thanks for easy low cost access to Broadband. If we get it wrong, other nations will quickly step into the opportunity that we declined.

Understanding the above over arching concepts, what follows below are a set of points that I hope those doing the work of the MO&O will reflect on as they finish crafting this 2nd response for the FCC in the 04-186 docket.



RURAL ECONOMICS

1. Broadband (BB) is becoming a quietly important service in rural parts of the US. In fact in rural areas it is more important in many ways than in urban areas as BB can enable access to revenue streams that rural economies usually never have access to. For the same reason that Universal Service Fund (USF) policies were developed in the first place, so too will USF reforms need to be transitioned to support a new rural BB infrastructure reality. And, if the right approach in TVWS service rules was developed, an order of magnitude of USF cost savings might be possible.

SERVICE DELIVERY

2. Consideration needs to be paid to enabling innovative outdoor uses of this spectrum. Given the special challenge that our Country faces in a BB delivery context—thanks in large part to our diverse broad lands—with the right TVWS service rules, cost effective deployment can be provided at a lower than normal infrastructure built out cost--while still covering a large percentage of rural areas.

2a. To drill down further, the rural US needs to keep deployment costs low and coverage areas large. Imposing uninformed rules on base station antennas height restrictions without refinement could easily defeat this goal. Assuming the protection of primaries is a given--antenna height should ideally be determined by the population density of the service area being covered in combination w/the effective radiated power from its antenna

2b. For outdoor deployments in TVWS spectrum, given the nature of the propagation characteristics of TVWS radio systems, the Commission may wish to consider the creation of a certification or license --not unlike that which the ARRL & HAM operators have--that would assure that entities deploying in TV spectrum possess a demonstrated level of professionalism and expertise in required engineering disciplines.

2c. Competition in an important part of the US economy's strength. Setting the right rules in the TVWS will allow competition to take place and will be a long term benefit to our country--even if it benefits a new industry at the expense of an older one.

2d. Assuring that customer premise equipment does not face the barrier of an over-burdened business model is also important. The wrong CPE antenna height rules could quickly have negative effects and could destroy the value that TV spectrum holds--not to mention its potential to help push forward a US national broadband policy agenda.



POWER LEVEL & SERVICE RULES

3. Again, assuming primary user protection is a given, as with antenna height, EIRP (aka station operating output power) in rural areas should be allowed to provide services that can cover large areas at low costs. As is the case with tower height, operating with higher power provides larger coverage areas. Generally speaking, our Nation, its companies, & local governments may not need to spend as much money on infrastructure as they think they should. If the TVWS service rules are crafted correctly this could easily be demonstrated.

HIGHEST AND BEST USE

4. Assuring that this beach front spectrum is used to its best effect to deliver value to the American people is important as well. Some commenters wish to use this important beach front spectrum resource for installation of a system that would NOT provide the highest and best use. There are many ways to do wireless backhaul of networks that are currently in the marketplace today and that have a great match between the goal of providing backhaul & the spectrum used to do so.

I urge the Commission to see to it that this beach front spectrum is put to its best use given its very clear RF propagation characteristics. I also hope that the Commission understands that because of the propagation characteristics it would be very short sighted to use this spectrum for backhaul.

FUTURE TECHNOLOGY

5. Please consider evolving technology as a separate path to the goal of efficient spectrum use and primary user protection. For instance, the service rules for the TV spectrum's EIRP may someday be able to be changed dynamically to allow for better co-existence and more services to be delivered via the TV band's allocation of spectrum. Will the MO&O's rules allow for these future possibilities? Tying dynamic quantities (that may or may not be databased information) to service rule definitions is one way to consider future proofing said service rules.

WORLD MARKET OPPORTUNITY

6. The TV band channelization schemes that can be found around the world offer in my opinion an amazing US industry opportunity--if the TVWS service rules are crafted to allow for alignment with other global TV markets. This is a truly global opportunity. If the Commission supports one or two domestic company business models (thanks to their lobbying effort at the FCC) at the expense of a future global market opportunity, that would be tragic.



THE FUTURE

To close, it seems clear that the future of this significant opportunity for the US is in the FCC's hands. As such here are some important points for those doing or influencing this work to keep in mind as they move to finish work on FCC 04-186..

- § Please remember the FCC is an INDEPENDENT expert agency able to make hard choices about winners and losers—so long as such choices are made on behalf of American citizens.
- § Public & private equity markets are resilient and can adapt to change
- § This country needs a cost effective broadband infrastructure in both rural and urban settings
- § Broadband is the foundation of many a future rural economic success story
- § Please keep your thinking long term and try to protect innovation
- § Please be mindful that the TVWS is an important US economic opportunity for goods and services that are outside of the sphere of these proceeding
- § Knowing that this MO&O will have a lasting impact on this Country for decades to come, please consider taking your time with this proceeding so you can get it right.

Thank you for considering these comments and contributions as you work to finish this rule making.

Respectfully,

Dan Lubar
Managing partner
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